Competency 2.4 **Occupational safety personnel shall demonstrate the ability to apply and implement occupational safety related sections and/or requirements of Orders, codes, standards, and regulations for a given industry, operation, facility, or hazard.**

1. Supporting Knowledge and Skills

a. Identify, locate, and implement the requirements of the applicable Orders, codes, standards, or regulations for a given work condition/situation or hazard(s).

b. Discuss the role of job safety analyses, hazard analyses, and other safety review techniques in the implementation of occupational safety requirements.

c. Discuss the requirements of a given Order, code, standard or regulation in terms of the impact on design, operation, maintenance, inspection, storage, testing, training, and reporting.

d. Review the requirements in a given Order, code, standard or regulation and the need for developing a written program to implement the regulation.

2. Self-Study Activities (corresponding to the intent of the above competency)

Below are two web sites containing many of the references you may need.

Web Sites		
Organization	**Site Location**	**Notes**
Department of Energy	http://wastenot.inel.gov/cted/stdguido.html	DOE Standards, Guides, and Orders
OSHA	http://www.osha-slc.gov/	OSHA documents and search engine
U.S. House of Representatives	http://law.house.gov/cfr.htm	Searchable Code of Federal Regulations

Occupational Safety Competency 2.4

NOTE: Competency 2.4 requires federal occupational safety professionals to demonstrate proficiency in applying and implementing regulations relevant to the needs of each facility's occupational safety program. To reflect the intent of the competency, the exercises focus on *process* rather than content. Apply those documents governing your facility's occupational safety program to the exercises provided below. Representative sample answers are provided in the Exercise Solutions section.

EXERCISE 2.4-A Assume that you have responsibility for occupational safety for a construction site where excavation is a common activity. What reference materials might you require to adequately provide oversight for this activity? What DOE Order might provide a starting point to search for applicable orders and restrictions?

EXERCISE 2.4-B List at least 20 of the most significant regulations, codes, and standards (federal, state, and local) governing your local occupational safety program?

EXERCISE 2.4-C Discuss the role of job safety analyses, hazard analyses, and other safety review techniques in the implementation of occupational safety requirements.

EXERCISE 2.4-D Identify an occupational safety issue relevant to your facility or site. Select a single Order, code, standard, or regulation and discuss the requirements of the selected standard as it applies to the following issues: design, operation, maintenance, inspection, storage, testing, training, and reporting. You may use the reference in completing the exercise. You may wish to use a matrix similar to the one provided.

Occupational Safety Regulatory Impact		
Reference:	**Facility:**	**Requirement:**
Function	**Impact**	
Design		
Operation		
Maintenance		
Inspection		
Storage		

Occupational Safety Regulatory Impact		
Reference:	**Facility:**	**Requirement:**
Function	**Impact**	
Testing		
Training		
Reporting		

EXERCISE 2.4-E Using the issue and references from Exercise 2.4-C, review the requirements of the relevant orders, standards, and so forth, and discuss the need for developing a written program to implement the regulation.

3. Summary

This competency requires the occupational safety specialist to maintain a familiarity with the controlling documents for their site/facility and speciality within the field of occupational safety and to demonstrate the ability to audit or assess a contractor's adherence to them. Federal occupational safety personnel should use process tools such as those provided in the self-study activities to assist in identifying the facility's controlling documents and in evaluating the impact of those documents.

DOE Order 5000.3B, *Occurrence Reporting and Processing of Operations Information*, requires investigation and reporting of occurrences and the selection, implementation, and follow-up of corrective actions. The level of effort expended should be based on the significance of the occurrence. DOE Guideline, DOE-NE-STD-1004-92, *Root Cause Analysis Guidance Document*, provides assistance in meeting this requirement and also in applying basic analysis procedures. Table 1, Summary of Root Cause Methods, on page 11 of the guideline, provides a convenient matrix to use in determining the appropriate method for performing occupational safety or other analyses.

4. Exercise Solutions

EXERCISE 2.4-A Assume that you have responsibility for occupational safety for a construction site where excavation is a common activity. What reference materials might you require to adequately provide oversight for this activity? What DOE Order might provide a starting point to search for applicable orders and restrictions?

ANSWER 2.4-A Title 29 CFR 1926, *Safety and Health Regulations for Construction*.

DOE Order 5480.4, *Environmental Protection, Safety, and Health Protection Standards*, specifies and provides requirements for the application of the mandatory environmental protection, safety, and health (ES&H) standards applicable to all DOE and DOE contractor operations.

EXERCISE 2.4-B List at least 20 of the most significant regulations, codes, and standards, (federal, state, and local) governing your local occupational safety program?

ANSWER 2.4-B This answer will be specific to your site. Confirm your answer with other occupational safety professionals at your facility. You should have included some or all of the following:

- 29 CFR 1910, *Occupational Safety and Health Standards*
- 29 CFR 1926, *Safety and Health Regulations for Construction*
- DOE Order 1540.2, *Hazardous Material Packaging for Transport - Administrative Procedures*
- DOE Order 3790.1B, *Federal Employee Occupational Safety and Health Program*
- DOE Order 5480.4, *Environmental Protection, Safety, and Health Protection Standards*

EXERCISE 2.4-C Discuss the role of job safety analyses, hazard analyses, and other safety review techniques in the implementation of occupational safety requirements.

ANSWER 2.4-C Aside from the regulatory requirements of 29 CFR 1910.120 and others, good practice would dictate the use of job safety analyses, hazard analyses, and other safety review techniques in the implementation of occupational safety requirements. It is not possible to eliminate hazards from a worksite without first identifying the hazards. The first stage in any good occupational safety program is to conduct job safety and hazard analyses to support the design of the program.

EXERCISE 2.4-D Identify an occupational safety issue relevant to your facility or site. Select a single Order, code, standard or regulation and discuss the requirements of the selected standard as it applies to the following issues: design, operation, maintenance, inspection, storage, testing, training, and reporting. You may use the reference in completing the exercise. You may wish to use a matrix similar to the one provided.

ANSWER 2.4-D Your answer will vary depending upon the issue you have chosen to address. A representative example is provided in this chart.

Occupational Safety Regulatory Impact		
Reference: DOE Order 3790.1B, VII,5.(c)1	**Facility:** Example	**Requirement:** Respiratory protection program control measures
Function	**Impact**	
Design	Written procedures are required for the selection and use of respirators. Proper selection of respirators is required. Other requirements stated in the reference make it clear that a formal policy and procedure must be formulated to ensure that the required issues are addressed.	
Operation	Where practical, respirators are to be assigned to individual workers.	
Maintenance	Regular cleaning and disinfecting (at least after each use) are required for respirators.	
Inspection	Inspection and maintenance (during cleaning for routinely used equipment and monthly for emergency equipment) is required. Additionally, inspection and evaluation of program effectiveness is required.	
Storage	Storage must be in a clean, sanitary location.	
Testing	Not addressed.	
Training	The reference requires that the users be trained on the use of respirators.	
Reporting	The reference requires that inspection and evaluation of program effectiveness be done, as well as surveillance of work area conditions, and inspection and maintenance of the respirators.	

EXERCISE 2.4-E Using the issue and references from Exercise 2.4-C, review the requirements of the relevant Order, standard, code, or regulation, and discuss the need for developing a written program to implement it.

ANSWER 2.4-E Your answer will vary depending upon the issue you have selected in your exercise; however, consider the analysis chart provided in deciding whether a written program is necessary to implement the requirement.

Cost-Benefit Analysis of Regulatory Compliance	
Factor	**Issues**
Importance	What is the consequence of error? What are the potential hazards and results that could occur if the requirement is not met? Particular emphasis is placed upon the likely effect upon the safety of the public, workers, and the environment.
Frequency	What is the frequency of occurrence of the activity or safety issue being addressed? Activities that occur infrequently may result in personnel being unfamiliar with the proper safety precautions and procedures and may therefore be more likely to result in error.
Difficulty	How difficult is the activity to perform safely? How likely is an individual to err in the normal course of performing the activity? Difficult activities, especially if performed infrequently, are good subjects for formal, written programs. In these cases, the use of checklists, scheduled reviews and maintenance activities, and formal evaluations and assessments may be warranted.
Cost-Benefit	What is the cost of implementing a written program to address the requirement? This should be a final consideration after weighing the first three. It is a cost-benefit analysis that balances the cost of a formalized written program against the possibility and consequence of error in its absence. DOE's policy is to protect the public, workers, and the environment, so this should be the final and least significant factor in making your decision.